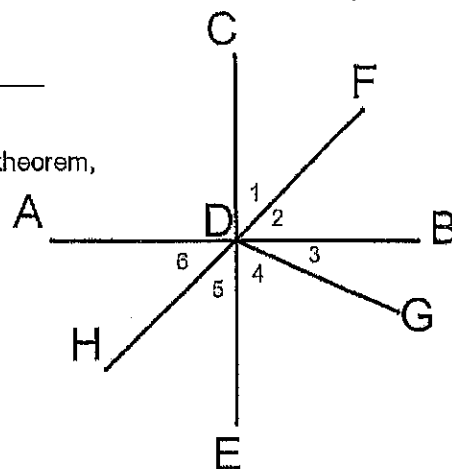


Name _____ Date _____

202 Chapter 2 Worksheet

Justify the following statements with a definition, postulate, property, theorem, etc...

1. SAP $AD + DB = AB$
2. AAP $m\angle 1 + m\angle 2 = m\angle CDB$
3. Add If $AD = BD$ and $CD = DE$, then $AD + CD = BD + CE$.
4. Vert. \angle s \cong $\angle 2 \cong \angle 6$
5. Def. \angle Bis If DF bisects $\angle CDB$, then $m\angle 1 = m\angle 2$.
6. Def. of midpt If D is the midpoint of AB , then $AD = DB$.
7. Def. of \perp lines If $CD \perp AB$, then $\angle CDB$ is a right angle.
8. Def. of \angle If $\angle CDB$ is a right angle, $m\angle CDB = 90$.
9. Suppl. thm Look at the picture, $\angle ADF$ and $\angle FDB$ are supplementary.
10. Def. of suppl. If #9 is true, then $m\angle ADF + m\angle FDB = 180$.
11. Def. of compl. If $m\angle 1 + m\angle 2 = 90$, then $\angle 1$ and $\angle 2$ are complementary.
12. Compl. of \angle s are \cong If $\angle 4$ and $\angle 5$ are complementary and $\angle 6$ and $\angle 5$ are complementary, then $\angle 4 \cong \angle 6$.
13. Suppl. of \angle s are \cong If $\angle 1$ and $\angle 2$ are supplementary and $\angle 2$ and $\angle 3$ are supplementary, then $\angle 1 \cong \angle 3$.

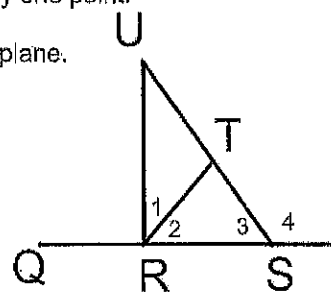
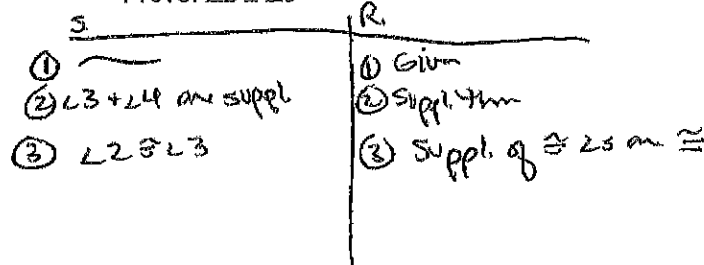


Complete with always, sometimes, or never.

14. Two points A lie in exactly one line.
15. Three points S lie in exactly one line.
16. Three points S lie in exactly one plane.
17. Three collinear points N lie in exactly one plane.
18. Two planes S intersect.
19. Two intersecting planes N intersect in exactly one point.
20. Two intersecting lines A intersect in exactly one point.
21. Two lines S intersect in exactly one point.
22. Two intersecting lines A lie in exactly one plane.

Write proofs for the following problems.

23. Given: $\angle 2$ and $\angle 4$ are supplementary
Prove: $\angle 2 \cong \angle 3$



24. Given: $\angle 1 \cong \angle 2$, $\angle 3 \cong \angle 4$
Prove: $\angle ABC \cong \angle DEF$

